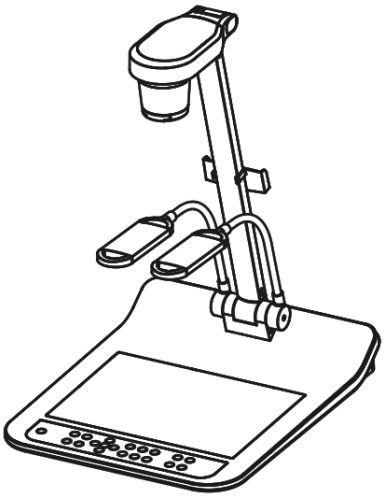
PS750
Document Camera

User Manual



[Important]

To download the updated quick start guide, multilingual manuals, software, and drivers, please visit Lumens website at http://www.lumens.com.tw/goto.htm

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Chapter 1 Precautions

Always follow these safety instructions when setting up and using the Document Camera:

1. Do not place Document Camera in tilted position.
2. Do not place the Document Camera on an unstable trolley, stand or table.
3. Do not use the Document Camera near water or source of heat.
4. Use attachments only as recommended.
5. Use the type of power source indicated on the Document Camera. If you are not sure of the type of power available, consult your dealer or local electricity company for advice.
6. Place the Document Camera on a place that it can be unplugged easily.
7. Always take the following precautions when handling the plug. Failure to do so may result in sparks or fire:
   - Ensure the plug is free of dust before inserting it into a socket.
   - Ensure that the plug is inserted into the socket securely.
8. Do not overload wall sockets, extensions leads or multi-way plug boards as this may cause fire or electric shock.
9. Do not place the Document Camera where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
10. Unplug the projector from the wall socket before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
11. Do not block the slots and openings in the projector case. They provide ventilation and prevent the Document Camera from overheating. Do not place the Document Camera on a sofa, rug or other soft surface or in a built-in installation unless proper ventilation is provided.
12. Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the Document Camera.
13. Except as specifically instructed in this User Manual, do not attempt to operate this product by yourself. Opening or removing covers may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
14. Unplug the Document Camera during thunderstorms or if it is not going to be used for an extended period, do not place the Document Camera or remote control on top of heat-emitting equipment or heated objects such as a car and etc.
15. Unplug the Document Camera from the wall outlet and refer serving to licensed service personnel when the following situations happen:
    - If the power cable or plug becomes damaged or frayed.
    - If liquid is spilled into it or the Document Camera has been exposed to rain or water.

<Note>: Using an incorrect battery type in the remote control may result in breakdown. Follow your country's instructions on how to dispose of used batteries.

■ Safety Precautions

Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

This Document Camera has a 3-wire AC line Plug. This is a safety feature to ensure that the plug will fit into the power outlet. Do not try to disable this safety feature.

If the Document Camera will not be used for a long period of time unplug it from the power outlet.

<table>
<tr><td colspan="4"> Note RISK OF ELECTRIC SHOCK </td></tr>
<tr><td colspan="4">Note: To reduce the risk of electric shock. Do not remove cover (or back). No user-serviceable parts inside. Refer servicing to licensed service Personnel.</td></tr>
<tr><td> </td><td>This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock.</td><td> </td><td>This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.</td></tr>
</table>

■ FCC Warning

This equipment has been tested and found to comply with the limits for a Class A or B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

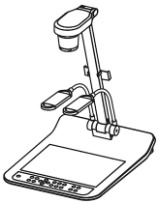
■ EN55022 (CE Radiation) Warning

This product is intended for use in a commercial, industrial, or educational environment. It is not intended for residential use.

This is a Class A product. In a domestic environment it may cause radio interference, in which case the user may be required to take adequate measures. The typical use is in a conference room, meeting room or auditorium.

Chapter 2 Package Content

PS750



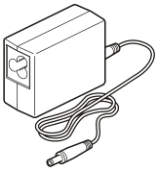
Quick Start Guide
(For download of other language versions, please visit Lumens website)

4-Step Card

Download and Safety Instruction

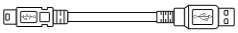
C-Video Cable

Power Adapter



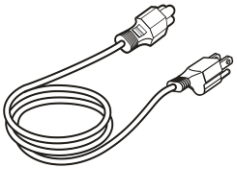
VGA Cable

USB Cable



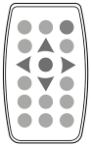
Audio cable

Power Cord



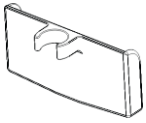
Appearance may vary with country/region

Remote Control

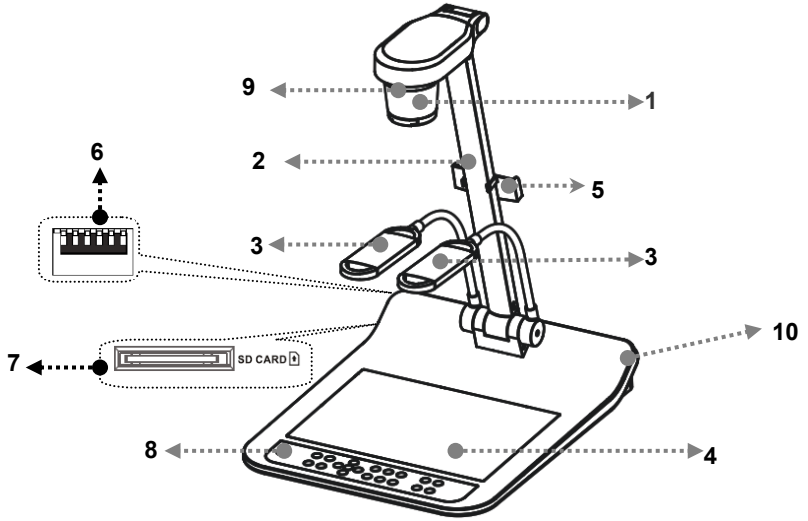


Microscope Adapter

Remote Control Holder

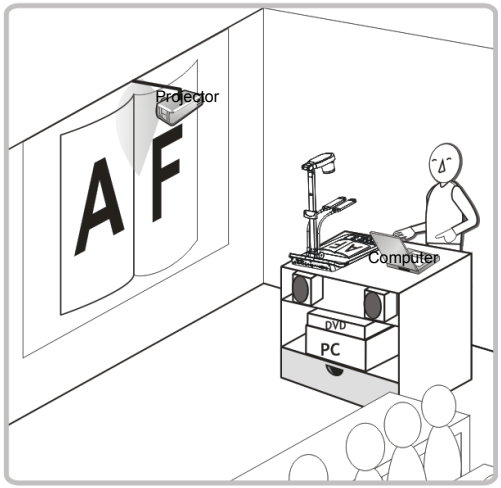


Chapter 3 Product Overview



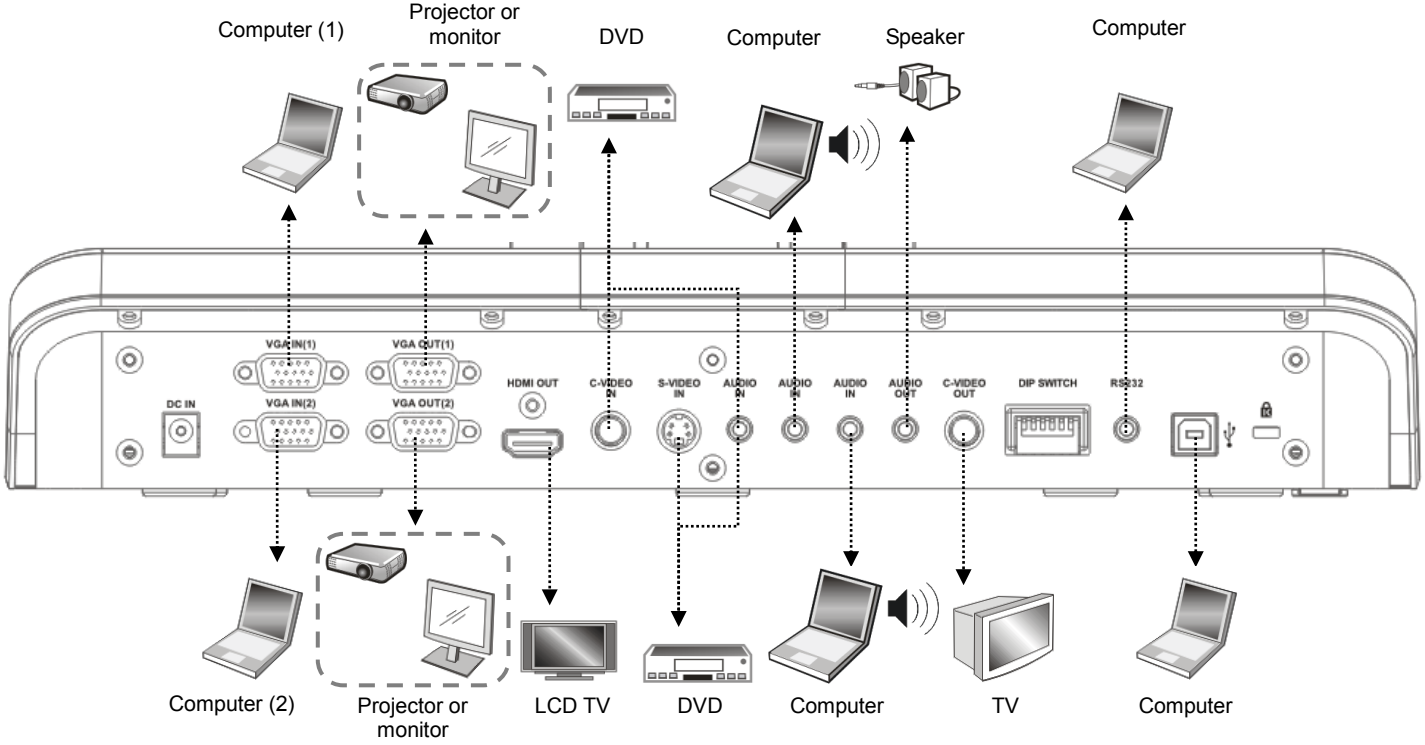
1. Lens
2. Camera arm
3. Auxiliary floodlight and lamp arm
4. Backlight
5. Remote Control Holder
6. DIP Switch Settings
7. SD card slot
8. Control Panel
9. Remote sensor
10. Input/output port

3.1 Relative Operation Position

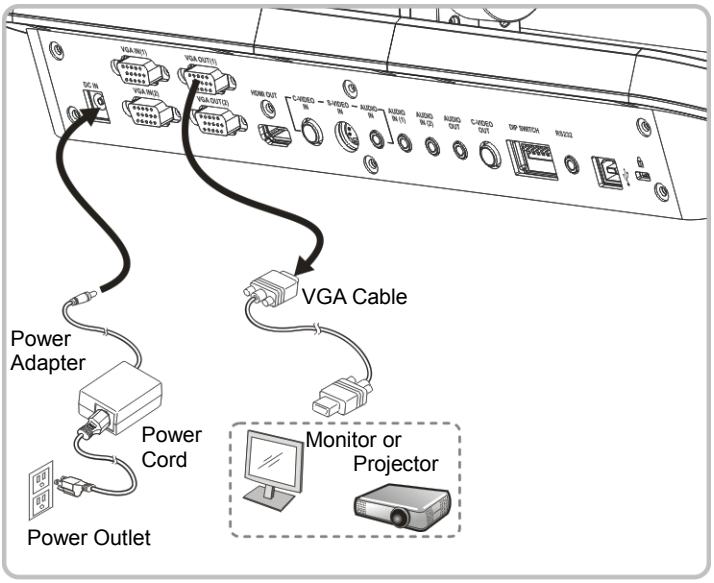


Chapter 4 Installation and Connections

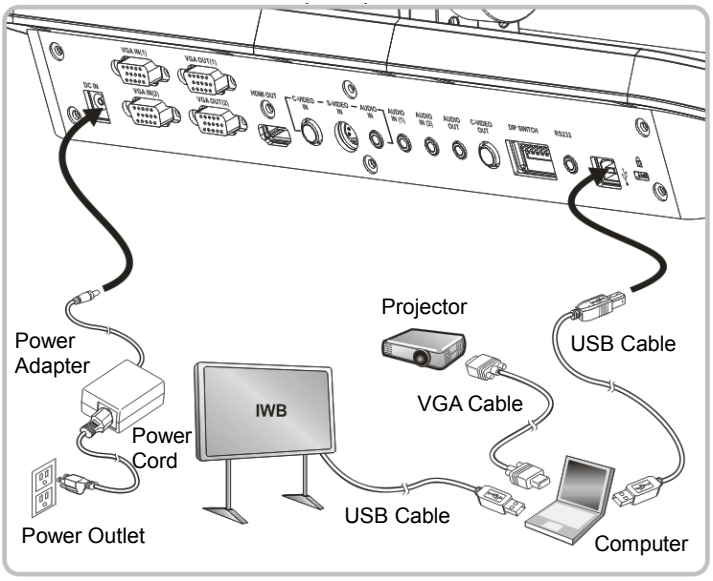
4.1 System Diagram



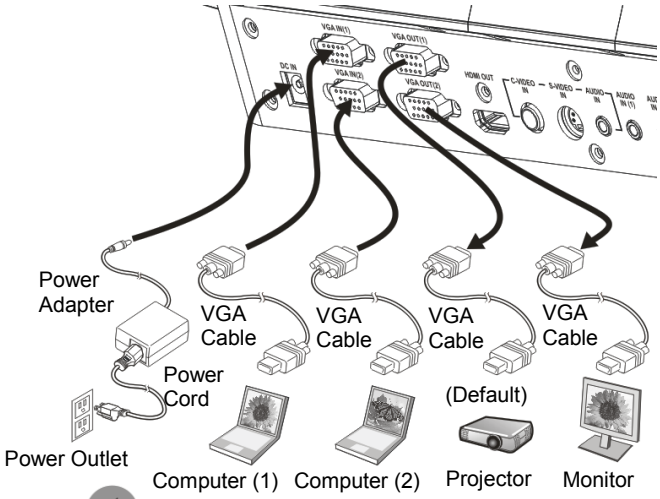
4.2 Connecting to a Projector or Monitor



4.3 Connecting to a Computer and Use Lumens Software or an Interactive Whiteboard (IWB)

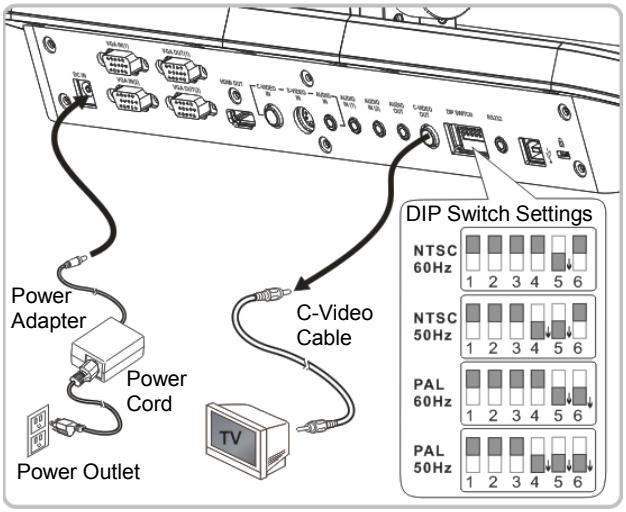


4.4 Connecting to a Projector, 2 PCs, and a Monitor at the Same Time



- Press button to switch the image sources.
- For VGA 1 setting, refer to **8.3 I would like to switch image sources**.
- For VGA 2 setting, refer to **8.2 I would like to set the image source of VGA OUT2**.

4.5 Connecting to a TV



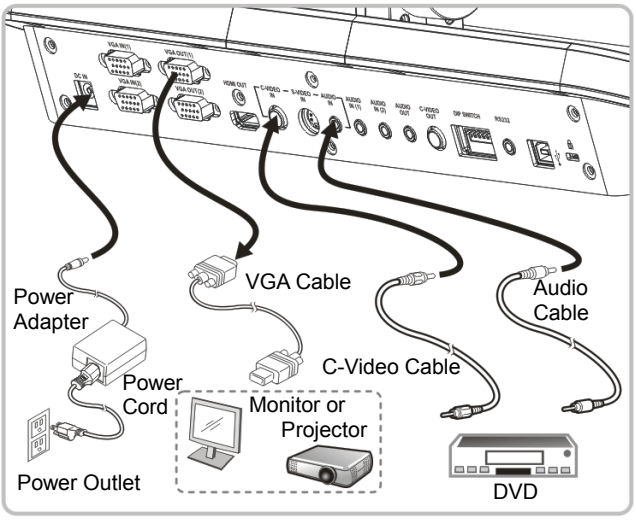
- NTSC: U.S.A., Taiwan, Panama, Philippines, Canada, Chile, Japan, Korea, and Mexico.
- PAL: Countries/regions not listed above.
- Please adjust it to be suitable for the local voltage frequency of 50/60Hz. For the frequency in actual use, please refer to the manual. (Attachment 1)
- You must re-start for DIP switching configuration to take effective.

<Note>: It doesn't support C-Video and VGA simultaneously. Once C-Video is on, VGA OUT is not supported.

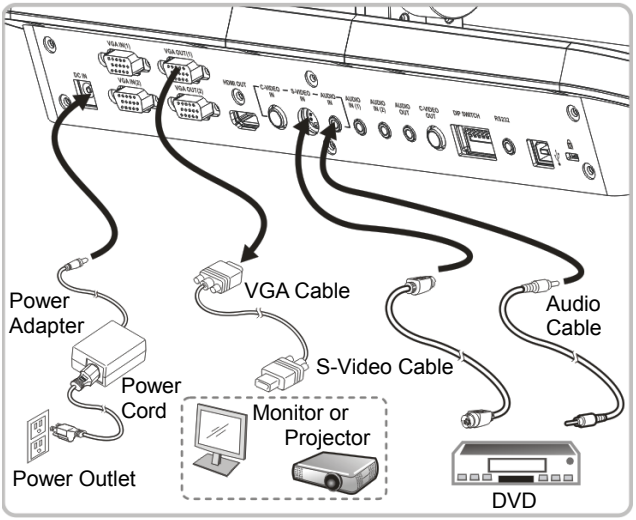
4.6 Connecting to DVD and display DVD images

- Press button to switch the image source.
- For VGA 1 setting, refer to **8.3 I would like to switch image sources**.
- For VGA 2 setting, refer to **8.2 I would like to set the image source of VGA OUT2**.

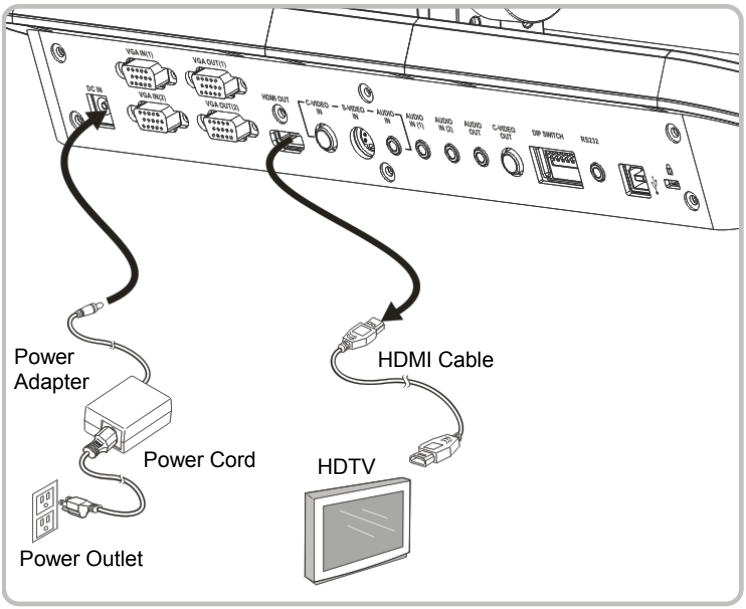
4.6.1 C-Video



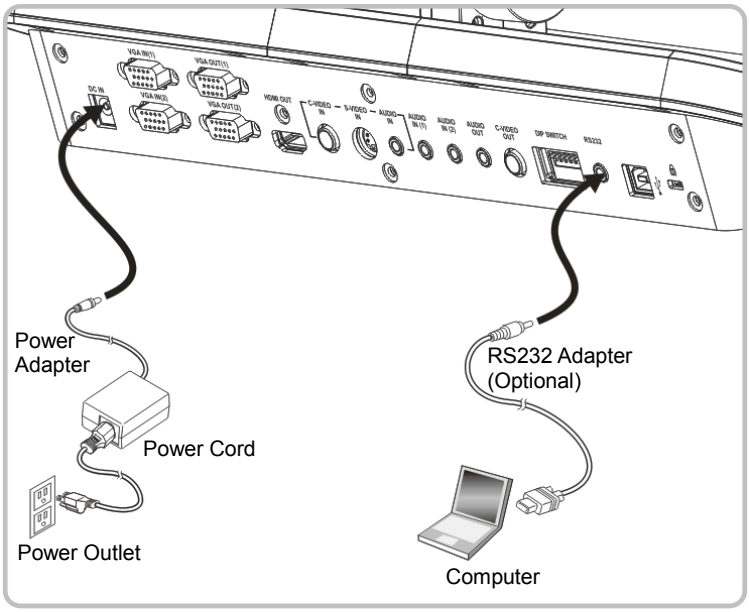
4.6.2 S-Video



4.7 Connecting to an HDTV

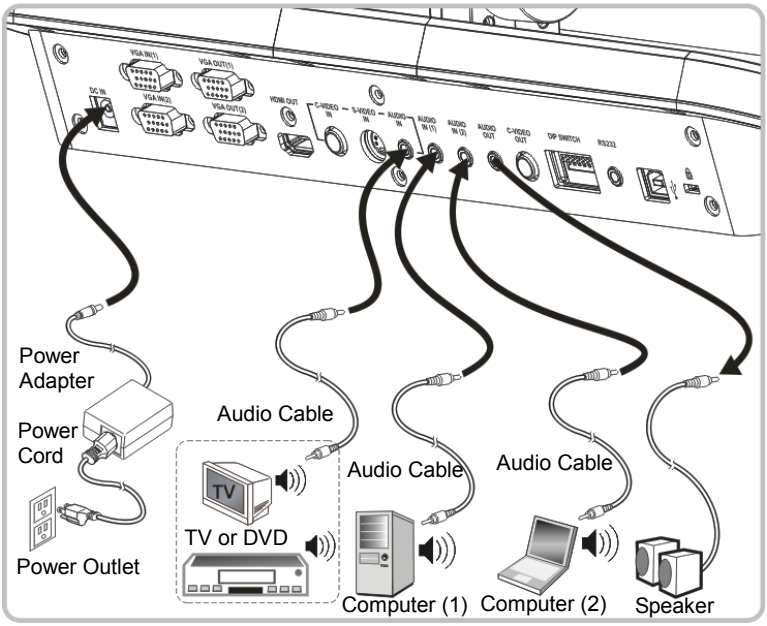


4.8 Connecting to a Computer with RS232



4.9 Connecting to Audio Input and Output

<Remark> Audio output is set according to VGA input; if VGA IN has Audio in, preset the output of audio source of VGA IN(1).



<Remark>: Or connect to an additional amplifier before connecting to the speaker.

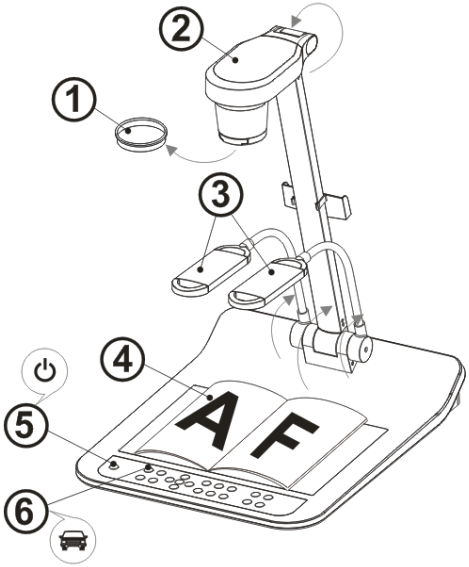
4.10 Installing application software

After installing the USB driver and application software, you can use the following functions:

- Control the PS750.
- Capture and record images.
- Annotate the image, highlight important details and save it.
- Support the full screen function.

<Note>: Please refer to Lumens™ software user manual for installation steps and software operation.

Chapter 5 Start Using



<Note>: Please adjust it to be suitable for the local voltage frequency of 50/60Hz. For the frequency in actual use, please refer to the manual. (Attachment 1)

1. Remove the lens cap.
2. Pull up the camera and the camera arm. The camera should aim at the center of the presenter.
3. Pull up the lamp arm to a proper position.
4. Place an object to be displayed under the camera.
5. Press [POWER] on the **remote control** or **control panel** to power on.
6. Press [AUTO TUNE] on the **control panel** to optimize the image. You are ready to present.
7. Each time the camera head is moved, press [AF] on the **remote control** or **control panel** to refocus the lens.

<Note>: According to your request, you can adjust the camera head slightly to aim at the center of the documents when the anchor of lens was reached.

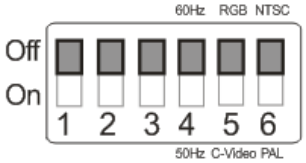
- When using the remote control, aim at the receptor on the PS750, and press the power button.
- Once PS750 is turned on, the LED on the control panel will flash a few times and stay lit. Please contact your distributor if the LED is not on.

Chapter 6 DIP Switch Settings

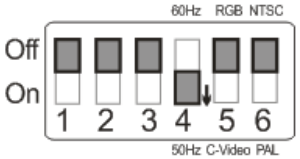
<Note>: You must re-start PS750 for DIP switching configuration to take effective.

6.1 Connecting to a projector or monitor

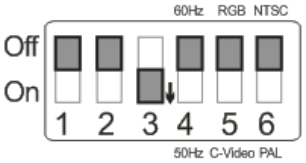
6.1.1 XGA *60Hz* output(default values)



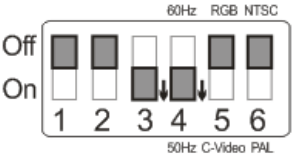
XGA *50Hz* output



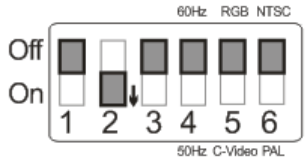
6.1.2 *SXGA 60Hz* output



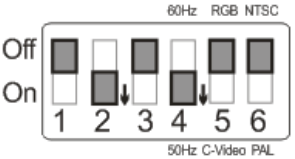
SXGA 50Hz output



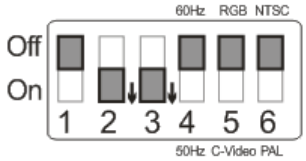
6.1.3 *720P 60Hz* output



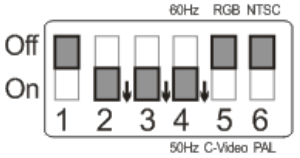
720P 50Hz output



6.1.4 Special Mode *60Hz* output



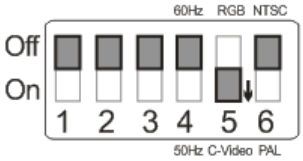
Special Mode *50Hz* output



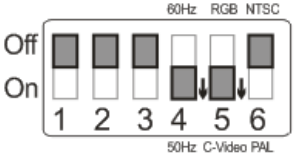
6.2 Connecting to a TV/DVD

6.2.1 *NTSC:* America, Taiwan, Panama, Philippines, Canada, Chile, Japan, Korea and Mexico

60Hz

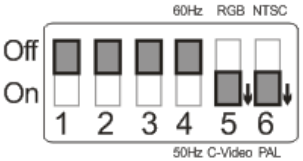


50Hz

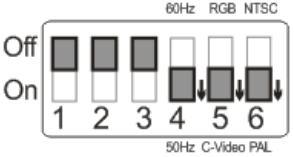


6.2.2 *PAL:* Countries or regions not listed above.

60Hz



50Hz



<Remark> It doesn't support C-VIDEO and VGA simultaneously. Once C-VIDEO is on, VGA is not supported.

Chapter 7 Control Panel/Remote Control and Setting Menu

7.1 Functions of control panel and remote control

<Note>: OSD is not available at C-VIDEO mode. [MENU] / [ENTER] / [PLAYBACK] / [ROTATE] / [PAN] / [RECORD] / [CAPTURE] / [DELETE] / [VGA] / [SLIDE SHOW] / [PBP] functions are not available on the machine panel and the remote control.

<Remark> The below functions are listed alphabetically.

Name	Function Descriptions	Operation
	Turn on and off the Document Camera.	**Remote control / Control panel**
←,→,↑,↓	Move up, down, left or right to select the needed function.	**Remote control / Control panel**
AF	Auto Focus	**Control panel**
AUTO TUNE	Automatically adjust the image to have the best brightness and focusing performance.	**Remote control / Control panel**
BRT+/-	Manually adjust the brightness of the image.	**Remote control / Control panel**
CAPTURE	Capture the image to the SD card (priority) or internal memory.	**Remote control / Control panel**
DELETE	Delete the image stored in the SD card (priority) or internal memory.	**Remote control**
ENTER	Enter/Activate functions.	**Remote control / Control panel**
FREEZE	Freeze the current image to temporarily stay on the screen. Press again to defreeze.	**Remote control / Control panel**
LAMP	Turn on / off the lamp.	**Control panel**

MENU	Activate the setting menu function/exit menu.	**Remote control / Control panel**
PAN	Switch a part of the live image.	**Remote control**
PBP	Display live images together with captured images.	**Remote control**
PLAYBACK	Display the list of captured images.	**Remote control / Control panel**
Projector ON	Turn on the projector.	**Control panel**
Projector OFF	Turn off the projector.	**Control panel**
RECORD	Press [Record] to record images to SD card (priority), press [Record] again to stop recording.	**Remote control / Control panel**
ROTATE	Rotate the image by 0°/90°/180°/270°	**Control panel**
SLIDE SHOW	Show the photos or videos stored in the SD card (priority) or internal memory in slide mode.	**Remote control / Control panel**
VGA 1	Switch between different image sources of **VGA 1** Document Camera/VGA IN(1)/VGA IN(2)/DVD	**Remote control / Control panel**
VGA 2	Switch between different image sources of **VGA 2** VGA Out (VGA OUT(1)) / VGA IN(1) / VGA IN(2) **<Note> VGA 2 button functions only when VGA OUT2 is set to (VGA IN), and for the related setting, refer to 8.2 I would like to set the image source of VGA OUT2.**	**Control panel**
ZOOM +/-	Increase or decrease the image size.	**Remote control / Control panel**

7.2 Setting Menu

<Remark> Press [MENU] on the remote control or control panel to enter the setting menu; The bold underlined values in the following table are the defaults.

1st Level Major Items	2nd Level Minor Items	3rd Level Adjustment values	Function Descriptions
Display	**Auto Tune**	**Enter**	Adjust the image to the optimal condition.
	Focus	0~**A**~Max	Use the left and right arrow keys to adjust focal length on an object.
	Brightness	0~**A**~Max	Use the left and right arrow keys to adjust brightness.
	Mode	**Normal**/Slide/Film /Microscope	Use the left and right arrow keys to select the image mode.
	Photo/Text	**Photo**/Text/Gray	Use the left and right arrow keys to select Photo/ Text/ Gray mode.
	Night Vision	On/**Off**	Use the left and right arrow keys to select. The night vision mode suits with darker environment.
	Digital Zoom	On/**Off**	Use the left and right arrow keys to turn **digital zoom** on/off.
Storage	**Slide Show**	**Enter**	Press [ENTER] to play the photos or videos stored in the SD card (priority) or internal memory.
	Slide Show Effect	1. **Off** 2. Shutter 3. Right 4. Down 5. Side 6. Open	Use the left and right arrow keys to select the image switch mode.
	Delay	1. 0.5 Sec 2. **1 Sec** 3. 3 Sec 4. 5 Sec 5. 10 Sec 6. Manual	Use the left and right arrow keys to select the delay time. Select manual mode to switch images manually.
	Image Quality	1. High 2. **Medium** 3. Low	Use the left and right arrow keys to select the image quality for the captured images and recorded videos.
	Copy To SD Card	**Enter**	Press [ENTER] to immediately copy the data in Document Camera to the SD card.

	Delete All	Yes/**No**	Use the left and right arrow keys to select, and then press [ENTER] to confirm the deletion of photos. Delete the image stored in the SD card (priority) or internal memory.
	Format	Yes/**No**	Use the left and right arrow keys to select, and then press [Enter] to format the data stored in the SD card (priority) or internal memory.
	USB Transfer	**Camera**/Storage device	Use the left and right arrow keys to select the USB transfer mode. 1. Camera: Connecting the PS750 to view live image. 2. Storage device: connecting to the SD card (priority) or internal memory.
Setting	**Capture**	1. **Single** 2. Continuous 3. Disable	Use the left and right arrow keys to select the video capture mode. (Single/Continuous/ Disable)
	Capture Time	1. **1 hr** 2. 2 hr 3. 4 hr 4. 8 hr 5. 24 hr	Use the left and right arrow keys to set the capture time. <Note> It only works when the capture mode is set to [continuous].
	Capture Interval	1. **5 Sec** 2. 10 Sec 3. 30 Sec 4. 1 Min. 5. 2 Min. 6. 5 Min.	Use the left and right arrow keys to set the capture interval. <Note> It only works when the capture mode is set to [continuous].
	Auto Exposure	**On**/Off	Regardless of outside environment, the machine will adjust the brightness to the optimal condition. Use the left and right arrow keys to select.
	White Balance	**Enter**	Regardless of outside light or color, the machine will adjust the color to the optimal condition; Press [Enter] to activate.
	Projector Type	DLP/**LCD**	Use the left and right arrow keys to select the projector type and reduce image noise.
	Volume	0~**A**~Max	Use the left and right arrow keys to adjust the volume.

	VGA OUT(2)	VGA IN / **VGA Out(1)**	1. Use the left and right arrow keys to select the images displayed by VGA OUT(2). 2. VGA IN: Use the [VGA 2] key on the **control panel** to select whether the screen images are output from VGA IN(1) or VGA IN(2). VGA Out(1): The image output is the same as the setting of VGA Out(1)
Advanced	**Language**	1. **English** 2. 繁體中文 3. Deutsch 4. Français 5. Español ……	English Traditional Chinese German French Spanish …… Use the left and right arrow keys in the Language option to select the preferred language.
	Lock Down	On/**Off**	Use the left and right arrow keys to turn the lock down function on and off. You can set the password when [On] is selected.
	Auto Erase	On/**Off**	Use the left and right arrow keys to turn the auto erase function on and off. When [On] is selected, the saved images will automatically be deleted when the system is turned off.
	Preset Load	Yes/**No**	Read the value of the current image mode. Use the left and right arrow keys to select, and then press [ENTER] to confirm.
	Preset Save	Yes/**No**	Save the value of the current image mode. Use the left and right arrow keys to select, and then press [ENTER] to confirm.
	Factory Reset	Yes/**No**	Use the left and right arrow keys to select, and then immediately press [ENTER]to activate the factory reset.

Chapter 8 Descriptions of major functions

8.1 I would like to automatically adjust the image to have best brightness and focusing performance (Auto tune)

1. Press [AUTO TUNE] on the **remote control** or **control panel** to adjust automatically.

8.2 I would like to set the image source of VGA OUT2

Press [MENU] on the **remote control** or **control panel** to enter the setting menu

1. Press [►] or [◄] to the [Setting] menu.
2. Press [▼] to enter [VGA OUT2].
3. Press [◄] or [►] to select [VGA OUT 1/VGA IN].
4. Press [MENU] to exit.

When **VGA OUT2** is set to **VGA IN**,

1. Press **[VGA 2]** on the **control panel** to switch between the image sources of **VGA IN(1)** and **VGA IN(2)**.

8.3 I would like to switch image sources

The default of image source is Live Image. Press **[VGA 1]** on the **remote control** or **control panel** to switch setting and PS750 will switch among the following five modes in turn:

1. Live images (default)
2. VGA IN(1)
3. VGA IN(2)
4. DVD C-Video
5. DVD S-Video

<Note> VGA IN mode will start only when it is connected to input equipment.

8.4 I would like to make text clearer and photos more colorful

The default of [PHOTO/TEXT] is PHOTO. Use the **remote control** or the **control panel** to change settings.

- [Photo] (default): for viewing photos or text with photos and will make the photos more colorful.
- [Text]: for viewing text files and will make the text clearer.
- [Gray]: for viewing black and white photos and will make the grayscale differentiation more distinct.

1. Press [MENU] to enter the setting menu.
2. Press [►] or [◄] to select [Display].
3. Press [▼] to select [Photo/Text].
4. Press [◄] or [►] to select [Photo/Text/Grey] (Refer to **the previous section** to make the most appropriate selection).
5. Press [MENU] to exit.

8.5 I would like to zoom in /out of images

1. Press [ZOOM +] on the **remote control** or **control panel** to zoom in.
2. Press [ZOOM -] on the **remote control** or **control panel** to zoom out.

8.6 I would like to use the auto focus

1. Press [AF] on the **remote control** or **control panel**.

8.7 I would like to adjust the brightness

1. Use the **remote control** or the **control panel** and press [BRT +] to increase the brightness.
2. Use the **remote control** or the **control panel** and press [BRT -] to decrease the brightness.

8.8 I would like to turn on / off the lamp

The default of the lamp is ON. When using the control panel:

1. Press [Lamp] to switch ON/OFF. (in the sequence of arm lamp/backlight/OFF)

8.9 I would like to capture images

8.9.1 Setting the quality of captured images

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Storage] menu.
3. Press [▼] to find [Image Quality].
4. Press [►] or [◄] to select among [High/Medium/Low].
5. Press [MENU] to exit.

8.9.2 Setting continuous capture

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Setting] menu.
3. Press [▼] to find [Capture].
4. Press [►] or [◄] to select [continuous].
5. Press [▼] to find [Capture Time]; Press [►] or [◄] to select time settings.
6. Press [▼] to find [Capture Interval]; Press [►] or [◄] to select time settings.
7. Press [MENU] to exit.

8.9.3 Capturing and saving images

1. Press [CAPTURE] on the **remote control** or **control panel**.
<Remark> If the capture mode is set to [continuous], press [CAPTURE] to capture images continuously, press [CAPTURE] again to exit.

8.10 I would like to view captured images

<Note> Images over 8 MB, cannot be played. Whilst playing, the [Rotate] function can be activated to rotate the images.

1. Press [PLAYBACK] on the **remote control** or **control panel** to display thumbnails of all captured images.
2. Press [▲] or [▼] or [◄] or [►] to select the thumbnail you want you view.
3. Press [ENTER] for the full-screen display of the image.
4. Press [►] or [◄] to turn to the previous/next image.
5. Press [MENU] to exit.

8.11 I would like to delete captured images

1. Use the remote control and press [PLAYBACK]
2. Press [▲] or [▼] or [◄] or [►] to select the thumbnail you want you delete.
3. Pressing [DELETE] will open a [Delete File] window.
4. Press [►] or [◄] to select [Yes] (The default value is No).
5. Press [ENTER] to delete the selected photo.
6. Press [MENU] to exit.

8.12 I would like to automatically delete the captured images whenever it is turned off (Auto Erase)

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Advanced] menu.
3. Press [▲] or [▼] to [Auto Erase].
4. Press [►] or [◄] to select [ON].
5. Press [MENU] to exit.
6. It will automatically delete all captured photos when it is turned off.

8.13 I would like to record motion images (Record).

8.13.1. Setting the image quality

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Storage] menu.
3. Press [▼] to find [Image Quality].
4. Press [►] or [◄] to select among [High/Medium/Low].
5. Press [MENU] to exit.

8.13.2. Recording motion images

1. Press [RECORD] on the **remote control** or **control panel** to start recording videos.
2. Press [RECORD] again to stop recording.

<Remark> Record sounds with the built-in microphone of the control panel.

8.13.3. Playing image

1. Press [PLAYBACK] on the **remote control** or **control panel** to display thumbnails of all videos recorded.
2. Press [►] or [◄] or [▲] or [▼] to select files to browse.
3. Press [ENTER] for full-screen play.
4. Press [▲] or [▼] to adjust the volume of the video.

<Note> When motion images are played back, the volume of

Audio Out can be controlled by up/ low arrow keys. In any other modes, you are not allowed to control volume using [▲] or [▼] key.

5. Press [►] or [◄] to turn to the previous/next video.
6. Press [SOURCE] to exit.

<Note> Only the files recorded can be played, and when live sound output is not available, additional amplifier can be connected to AUDIO OUT.

8.14 I would like to switch a part of the live image (PAN)

Use **Remote control**:

1. Press [PAN] to enter the image pan mode.
2. Press [▲] or [▼] or [◄] or [►] to move and view the partial enlarged images.
3. Press [PAN] to exit the partial enlarged mode.

8.15 I would like to play the slides (Slide Show)

8.15.1 Setting the slide show effect:

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Storage] menu.
3. Press [▼] to find the [Slide Show Effect].
4. Press [►] or [◄] to select image switch mode between [Off / Shutter / Right / Down / Side / Open].
5. Press [MENU] to exit.

8.15.2 Setting delay time

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Storage] menu.
3. Press [▼] to find [Delay].
4. Press [►] or [◄] to select image switch mode between [0.5 Sec / 1 Sec / 3 Sec / 5 Sec / 10 Sec / Manual].
5. Press [MENU] to exit.

8.15.3 Activating/Stopping the slide show

<Note> Images over 8 MB, cannot be played.

If you use the remote control or the control panel:

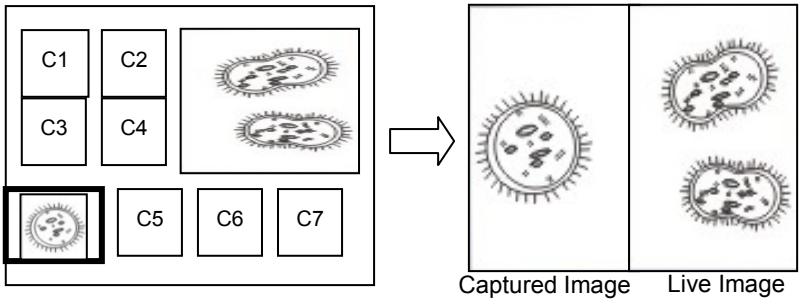
1. Press [SLIDE SHOW] to start playing.
2. Press [SLIDE SHOW] again to stop playing.

8.16 I would like to view the X-ray film

1. Place an X-ray film to be displayed under the camera.
2. Press [Lamp] button on the control panel to switch on the ***Backlight*** (in the sequence of arm lamp/backlight/OFF)
3. Press [AUTO TUNE] button to optimize the image.

8.17 I would like to compare images (PBP)

This function will compare and contrast a live image with a captured image.



Use Remote control

1. Press [PBP] to enter the PBP (Picture by Picture) photo selection screen.
2. Press [▲] or [▼] or [◄] or [►] to select the file to be compared.
3. Press [ENTER] to activate image comparison.
4. Press [►] or [◄] to move the image left or right.
   <Remark> Press [ENTER] to switch between the captured and live images.
5. Press [PLAYBACK] to return to image thumbnails.
6. Repeat Steps 2 ~ 4.
7. Press [MENU] to exit.

8.18 I would like to resume the factory default setting (Factory Reset)

8.18.1 Use the OSD menu

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Advanced] menu.
3. Press [▼] to the [Factory Reset].

4. Press [►] or [◄] to select [Yes].
5. Press [ENTER] to activate.

8.18.2 Use Compound Key

1. Use the **remote control** or **control panel**, and press **[Enter + Auto Tune]** simultaneously to restore the initial value.

8.19 I would like to change the Start Video/Off Video

<Note> The file size of the Start Video/Off Video should be less than 5MB and the AVI file in H.264 compression format should be used.

8.19.1 Changing the Start Video

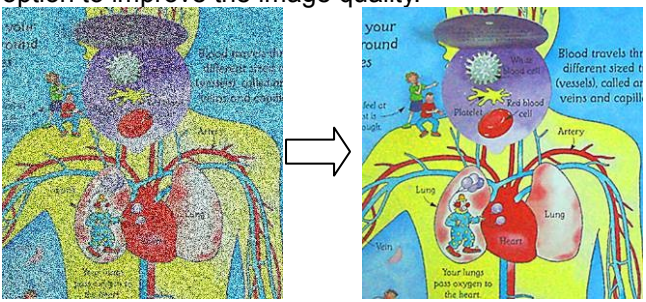
1. Press [ENTER] + [▲] on the **control panel** to enter ***Service Menu***.
2. Press [►] or[◄] to select [Pwr On] menu.
3. Press [▼] to [Image Select] and press [ENTER] to read the saved file.
4. Press [▲] or [▼] or [◄] or [►] to select the picture file and press [ENTER] to apply the change.
5. Press [▼] to [Start Video Select] and press [►] or [◄] to select [Default Video/ Customer Video].
6. Press [▼] to [Logo Show time] and press [►] or [◄] to modify the playback time.
7. Press [MENU] to exit.

8.19.2 Changing the Off Video

1. Press [ENTER] + [▲] on the **control panel** to enter ***Service Menu***.
2. Press [►] or [◄] to select [Pwr Off] menu.
3. Press [▼] to [Image Select] and press [ENTER] to read the saved file.
4. Press [▲] or [▼] or [◄] or [►] to select the picture file and press [ENTER] to apply the change.
5. Press [▼] to [Off Video Select] and press [►] or [◄] to select [Default Video/ Customer Video].
6. Press [MENU] to exit.

8.20 I would like to reduce the image noise (Projector Type)

1. This function enables Document Camera to automatically clear image noise. The noise is especially obvious when Document Camera is connected to a DLP projector. You can set the DLP projector to improve the image quality.
2. If there is special noise when VGA out is connected, please set DLP option to improve the image quality.



3. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
4. Press [►] or [◄] to the [Setting] menu.
5. Press [▼] to enter [Projector Type].
6. Press [►] or [◄] to select **[LCD/DLP]**.
7. Press [MENU] to exit.

8.21 I would like to control projector.

8.21.1 Connecting to a computer

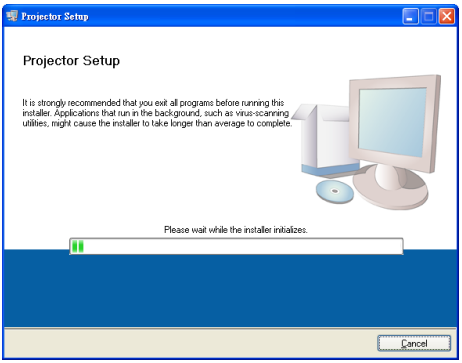
Connect PS750 to a computer, and for connecting method, refer to User Manual **4.8 Connecting to a Computer with RS232**.

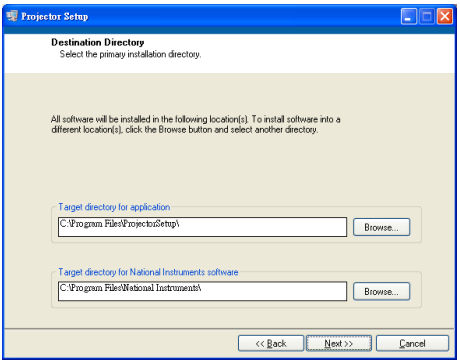
8.21.2 Installing application software

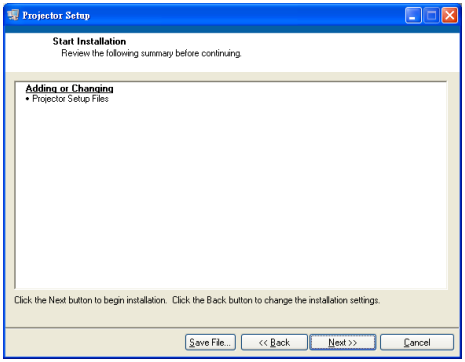
8.21.2.1 Go to Lumens website: **www.lumens.com.tw/goto.htm** and download the software **[Projector Control]**.

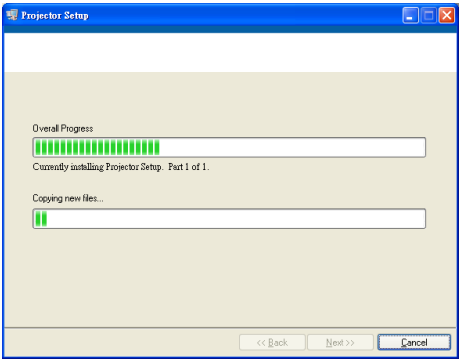
8.21.2.2 Extract the file and then click **[Setup.exe]** to install.

8.21.2.3 The installation wizard will guide you through the process. Please follow the on-screen instructions and press **[Next]** for the next step.

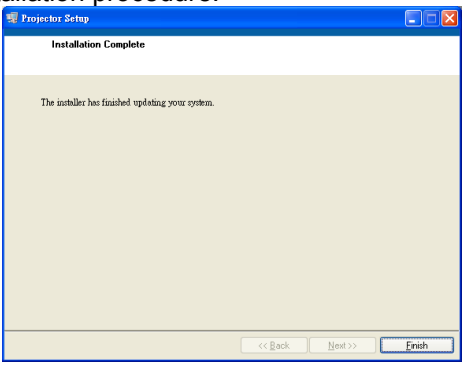

Projector Setup
Projector Setup
It is strongly recommended that you exit all programs before running this installer. Applications that run in the background, such as virus-scanning utilities, might cause the installer to take longer than average to complete.
Please wait while the installer initializes.
Cancel


Projector Setup
Destination Directory
Select the primary installation directory.
All software will be installed in the following location(s). To install software into a different location(s), click the Browse button and select another directory.
Target directory for application
C:\Program Files\ProjectorSetup\
Browse...
Target directory for National Instruments software
C:\Program Files\National Instruments\
Browse...
<< Back
Next >>
Cancel


Projector Setup
Start Installation
Review the following summary before continuing.
Adding or Changing
• Projector Setup Files
Click the Next button to begin installation. Click the Back button to change the installation settings.
Save File...
<< Back
Next >>
Cancel

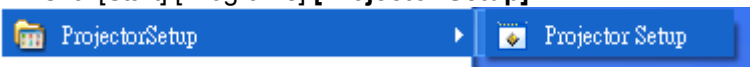


8.21.2.4 When the installation is completed, press **[Finish]** to end the installation procedure.



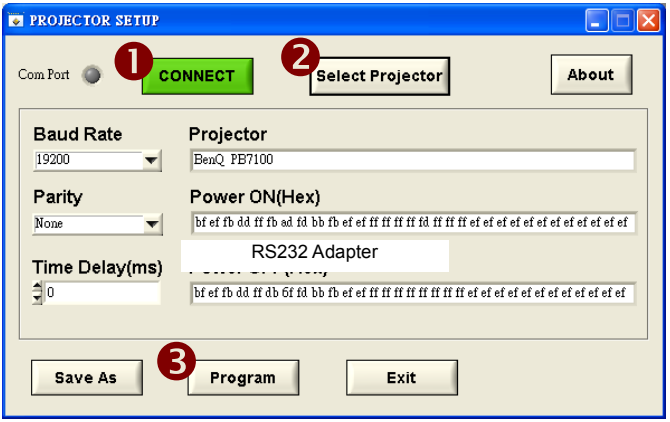
8.21.3 Setting procedure

8.21.3.1 Click[Start]/[Programs]/**[Projector Setup]**



8.21.3.2 When the procedure is started, a setting window will pop up.

8.21.3.3 Press **[CONNECT]** to set up the connection. **[Com Port]** lamp flashing green indicates a successful connection.



8.21.3.4 Press **[Select Projector]** to select the projector type and display information.

8.21.3.5 Press **[Program]** to switch PS750 settings.

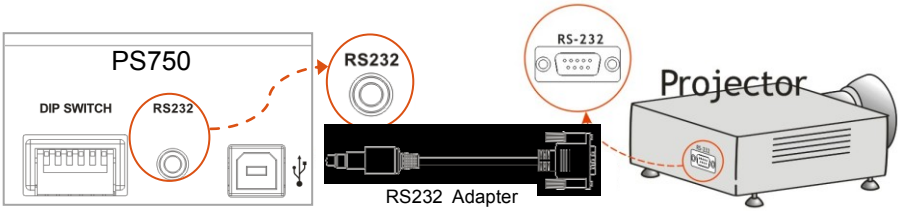
[Note] If any setting is modified, press **[Save as]** to set up a **"*.txt"** file for setting storage.

8.21.3.6 When the setting is completed, press **[Exit]** to exit.

8.21.4 Connecting to a projector

8.21.4.1 Remove the RS-232 cable from the computer.

8.21.4.2 Connect the RS-232 cable to the RS-232 port on the projector.



8.21.5 Control of projector

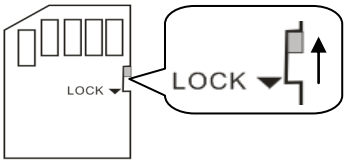
8.21.5.1 Press **[Projector ON]** on the **control panel** to turn on the projector.

8.21.5.2 Press **[Projector OFF]** on the **control panel** to turn off the projector.

8.22 Using a SD card

8.22.1 Deactivate the write protect function (SD Lock)

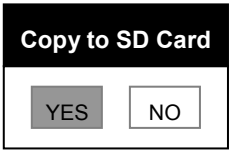
If the write protect function of the SD card is activated, you will not be able to use the **Capture** function, although you can still read the files in it. Adjust the Lock of the SD card to deactivate the write protect function.



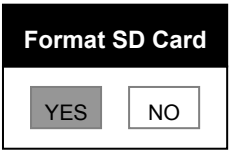
8.22.2 Inserting a SD card

8.22.2.1 The screen will display [Copy to SD card] and ask if you would like to copy the files saved in the PS750 to a SD card.

- Press [►] or [◄] on the **control panel** to select.



8.22.2.2 The screen will display as follow, once you insert an unformatted SD card:



- Press [►] or [◄] on the **control panel** to select.

<Note> The data previously saved on the SD card will be erased when it is formatting.

8.22.3 Ejecting a SD card

<Note> Turn the power off before ejecting the SD card to avoid damaging the SD card.

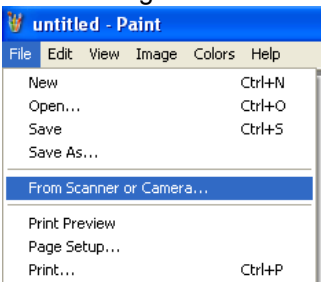
8.23 Computer-related functions

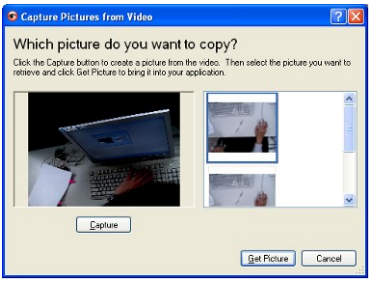
Ensure that the USB cable is connected and the drivers are installed before using the computer-related functions. Refer to **Chapter 4 Installation and**

Connections in this user manual.

8.23.1 I would like to insert a photo in MS-Paint

1. Click [File/From Scanner or Camera] in MS-Paint shown as the bottom left figure.



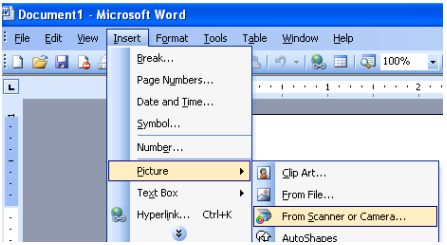

Capture Pictures from Video
Which picture do you want to copy?
Click the Capture button to create a picture from the video. Then select the picture you want to retrieve and click Get Picture to bring it into your application.
Capture
Get Picture
Cancel

2. Click [Get Picture] will capture the photos of live images and insert the files in use shown as top right figure.

8.23.2 I would like to insert a photo in *MS-Word*

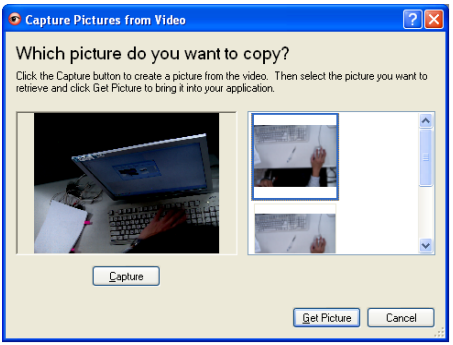
<Remark> For Windows Office 2003 or later versions, please use the function with OneNote.

1. Click [Insert / Image / From Scanner or Camera] in ***MS-Word***.



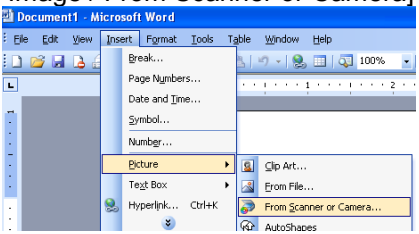
2. Select [Visual Presenter V2] and click [Custom Insert].

3. Click [Get Picture]. It will capture the photo of live image.

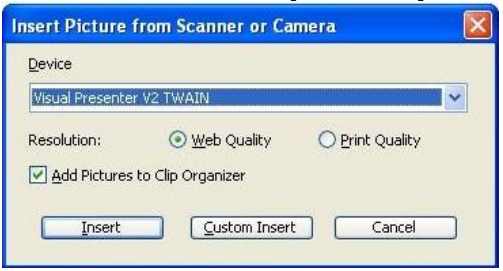

Capture Pictures from Video
Which picture do you want to copy?
Click the Capture button to create a picture from the video. Then select the picture you want to retrieve and click Get Picture to bring it into your application.
Capture
Get Picture
Cancel

8.23.3 I would like to change the setting of the PS750 and then capture a photo in *MS-Word*

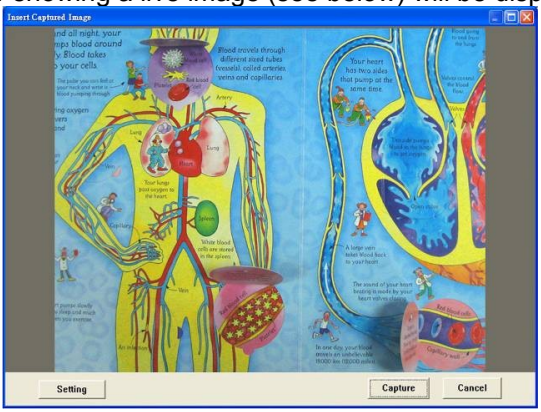
1. Click [Insert / Image / From Scanner or Camera] in ***MS-Word***.



2. Select [Visual Presenter V2 TWAIN] and click [Custom Insert].



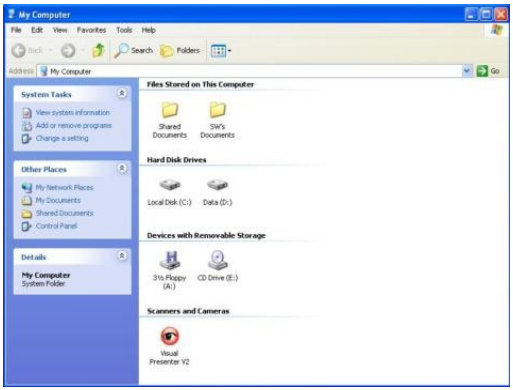
3. A window showing a live image (see below) will be displayed:



4. Press [Setting]
   To control the PS750 via the Camera Settings interface. The operating procedure is the same with the **remote control** and **control panel** of the PS750. Refer to **PS750 User Manual Chapter 7 Control Panel / Remote Control and Setting Menu**.
5. Press [Capture] to capture images in ***MS-Word***.
6. Press [Cancel] to exit.

8.23.4 I would like to set the PS750 as a *PC Camera*

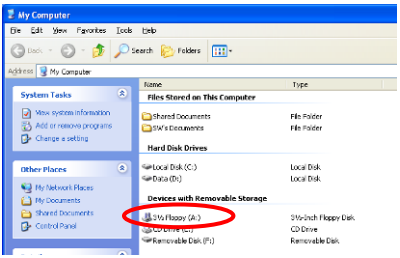
1. Press [MENU] on the **control panel** or **remote control** to enter the setting menu.
2. Press [►] or [◄] to the [Storage] menu.
3. Press [▼] to find [USB Transfer].
4. Press [►] or [◄] to select [Camera].
5. A window will be displayed, showing the [Visual Presenter V2], as shown below.



6. Click the [Visual Presenter V2].

8.23.5 I would like to set the PS750 as a Removable Disc

1. Press [MENU] on the **control panel** or **remote control** to enter the setting menu.
2. Press [►] or [◄] to the [Storage] menu.
3. Press [▼] to find [USB Transfer].
4. Press [►] or [◄] to select [Storage device].
5. Press [MENU] to exit.
6. A [Removable Disc] will be displayed.



<Remark> The Removable Disc will select SD card if a SD card has been inserted, but if a SD card has not been inserted, the Removable Disc is internal memory

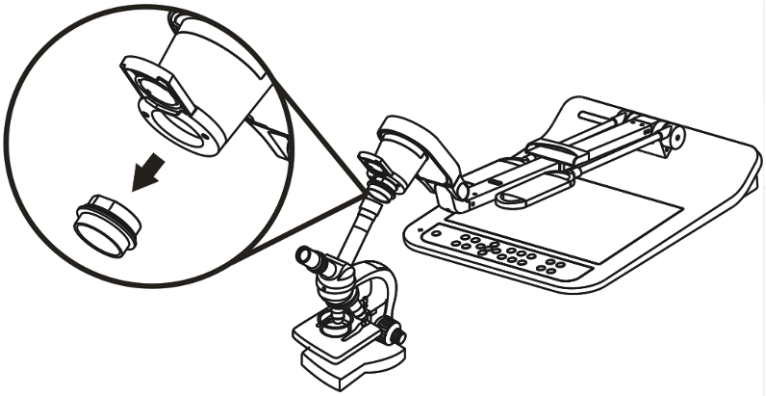
<Note> Doing this will disable the [Capture] function. Suggest you return it to [Camera] mode after using this function. Please follow the 8.23.5 Steps 1 ~ 5.

Chapter 9 Connecting to Microscope

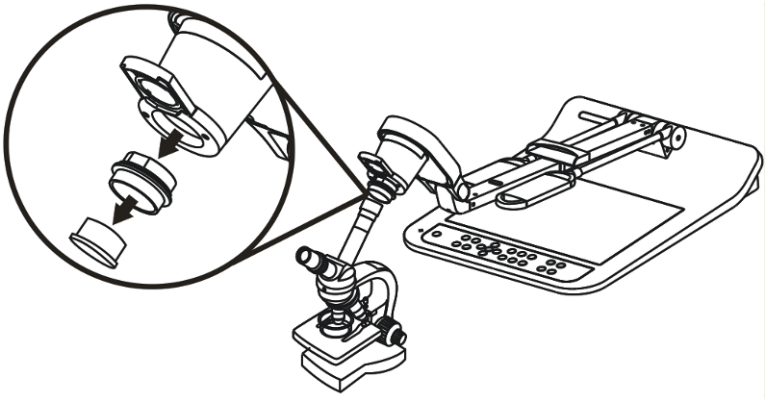
1 Mount the **microscope adaptor** (Optional accessory) onto the microscope.
<Note> Please choose an appropriate microscope adapter. Microscope adapter accessories are applicable to eyepieces of Ø28mm, Ø31mm, Ø33mm, and Ø34mm.

2 The lens of PS750 connects with the **microscope adapter**.

If the eyepiece is Ø33mm or Ø34mm, only one Lumens microscope adapter is needed.



If the eyepiece is Ø28mm or Ø31mm, you need two microscope adapters. (1. The Lumens microscope adapter. 2. The microscope adapter suitable for the eyepiece size Ø28mm or Ø31mm).



3 Select the **[Microscope]** Mode

3.1. If you use the **remote control** or the control panel
   3.1.1. Press [MENU] to enter the setting menu.
   3.1.2. Press [►] or [◄] to the [Display].
   3.1.3. Press [▼] to select [Mode].
   3.1.4. Press [►] or [◄] to the [Microscope].

4 If the image is not clear
   4.1. Please adjust the focus of microscope.
   4.2. Please press the **control panel** [AF] button to activate the auto focus.

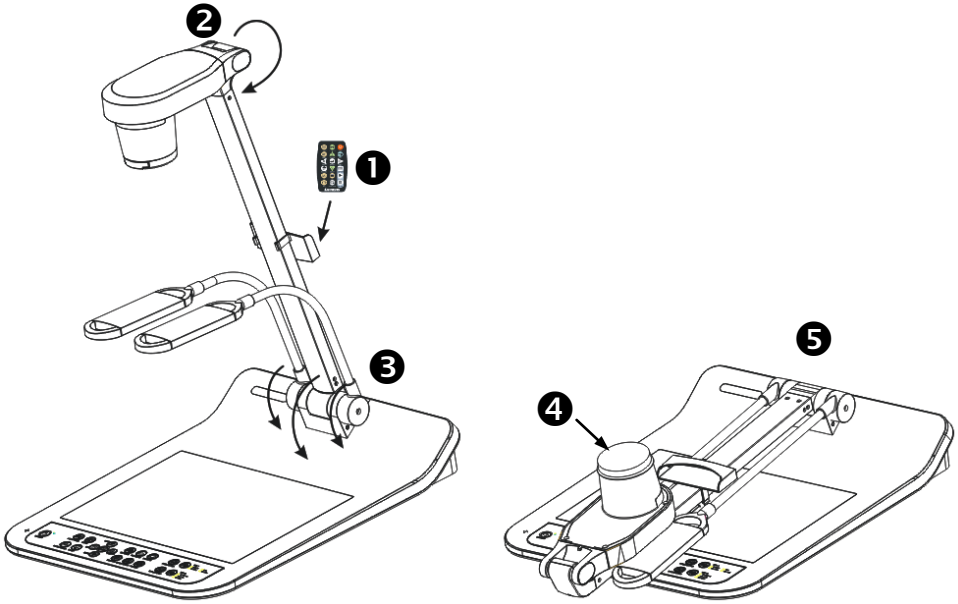
5 Digital Zoom
   5.1. If you use the **remote control** or the control panel
      5.1.1. Press [MENU] to enter the setting menu.
      5.1.2. Press [►] or [◄] to the [Display].
      5.1.3. Press [▼] to select [Digital Zoom].
      5.1.4. Press [►] or [◄] to select [On].
      5.1.5. Press [Zoom +] / [Zoom -]

<Note> Please reset to normal mode after using the microscope, otherwise, you are unable to use zoom in/out function.

1. Press [MENU] on the **remote control** or **control panel** to enter the setting menu.
2. Press [►] or [◄] to the [Display].
3. Press [▼] to select [Mode].
4. Press [►] or [◄] to the [Normal].

Chapter 10 Packing the Machine

1. Put the remote control back to the holder.
2. Fold back the camera head to align with the arm.
3. Turn the two lamp arms and the arm of camera head down and adjust them to be parallel with the platform.
4. Put the lens cap on the camera head.
5. Finally, fold the machine as in the following figure.



Chapter 11 Troubleshooting

This chapter describes problems you may encounter while using PS750. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact our distributors or service center.

No.	Issues	Solutions
1	**Boot without power**	Make sure you have plugged in the power cord.
2	**No image output from the PS750**	1. Check the power. 2. Check the connection, Refer to **PS750 User Manual Chapter 4 Installation and Connections** **3.** Check the , refer to **PS750 User Manual Chapter 8 Descriptions of major functions 8.3 I would like to switch image sources**. **4.** Check the settings for the source of the projector. For the appropriate input selection of the projector, refer to the projectors user manual. 5. Check if DIP Switch is properly set. Refer to **PS750 User Manual Chapter 6 DIP Switch Settings** for related settings.
3	**Unable to focus**	Probably the document is too close. Press [Zoom -] on the **remote control or control panel**. Or pull away the distance between document and lens, then press [AF].
4	**The image is incomplete**	Check the Auto Image setting of your projector. Please refer to the user manual of the projector.
5	**Forget the password for turning on**	Please contact your distributor or the service center.
6	**Lumens Document Camera, Lumens™ and other applications cannot be used simultaneously**	**Lumens Document Camera, Lumens™** and other applications cannot be executed simultaneously. Please close the currently running applications and then execute the application to be used.
7	**When the unit is turned on, the auxiliary floodlight**	Please make sure the arm lamp is set to [OFF]. For the switch-on or -off of arm lamp, refer to **PS750 User Manual Chapter 8 Descriptions of major functions 8.8 I would**

	do not light.	**like to turn on / off the lamp**.
8	**PS750 fails to store images or react.**	1. Please make sure whether the stored data has reached the maximum storage capacity of PS750 unit or SD card. 2. Please make sure if SD card is adjusted to the data protection mode (Lock). Suggest you take out the SD card from PS750, and then adjust the SD card to the mode of Unlock. 3. Please make sure if the Capture function is set to Continuous mode or the time for capture is set to be long. For the related setting, refer to **PS750 User Manual Chapter 8 Descriptions of major functions 8.9 I would like to capture images**.
9	**The images outputted from PS750 are too bright, dark or vague.**	Press [AUTO TUNE] to automatically adjust to the optimal brightness and focal length.
10	**The images outputted are not clear, and the moire appears.**	Please refer to the manual (**Attachment 1**), confirm the voltage frequency and reset it according to **Chapter 6 DIP Switch Settings**

Attachment 1

World voltage & frequency

Region/Country		Frequency	Region/Country		Frequency	Region/Country		Frequency
Chinese	English		Chinese	English		Chinese	English	
阿富汗	Afghanistan	50	大陸	China	50	關島	Guam	60
阿爾及利亞	Algeria	50	哥倫比亞	Colombia	60	石榴島	Grenada	50
安哥拉	Angola	50	剛果	Congo	50	瓜地馬拉	Guatemala	60
安地瓜	Antiqua	50	哥斯大黎加	Costa Rica	60	幾內亞	Guinea	50
阿根廷	Argentina	50	古巴	Cuba	60	蓋亞納	Gayana	50
澳洲	Australia	50	塞普路斯	Cyprus	50	海地	Haiti	60
澳地利	Austria	50	捷克	Czechoslovakia	50	夏威夷	Hawaii	60
亞述爾	Azores	50	達荷美	Dahomey	50	宏都拉斯	Honduras	60
巴哈馬	Bahamas	60	丹麥	Den mark	50	香港	Hong Kong	50
巴林	Bahrain	60	多明尼加	Dominican	60	匈牙利	Hungary	50
孟加拉	Bangladesh	50	杜貝	Dubai	50	冰島	Ice land	50
巴貝多	Babados	50	厄瓜多爾	Ecuador	60	印度	India	50
比利時	Belgium	50	埃及	Egypt	50	印尼	Indonesin	50
百慕達	Bermuda	60	薩爾瓦多	El Salvador	60	伊朗	Iran	50
玻利維亞	Bolivia	50	赤道幾內亞	Equatorial Guinea	50	伊拉克	Iraq	50
波札那	Botswana	50	衣索匹亞	Ethiopia	50	愛爾蘭	Ireland	50
巴西	Brazil	50 60	法羅群島	Faeroe Island	50	曼島	Isle of Man	50
保加利亞	Bulgaria	50	裴濟	Fiji	50	以色列	Israel	50
緬甸	Burma	50	芬蘭	Finland	50	義大利	Italy	50
蒲隆地	Burundi	50	法國	France	50	象牙海岸	Ivory Coast	50
高棉	Cambodia	50	蓋亞那	French Guiana	50	牙買加	Jamaica	50
喀麥隆	Cameroon	50	加彭	Gabon	50	日本	Japan	50 60
加拿大	Canada	60	甘比亞	Gambia	50	約旦	Jordan	50
康那利群島	CanaryIsland	50	德國	Germany	50	肯亞	Kenya	50
中非共和國	Central Africa Rep.	50	迦納	Ghana	50	韓國	Korea	60
錫蘭	Ceylon	50	直布羅陀	Gibraltar	50	科威特	Kuwait	50
查德	Chad	50	大不列顛	Great Britain	50	黎巴嫩	Lebanon	50
海峽群島	Channel Island	50	希臘	Greece	50	賴索托	Lesotho	50

Region/Country		Frequency	Region/Country		Frequency	Region/Country		Frequency
Chinese	English		Chinese	English		Chinese	English	
智　利	Chile	50	格陸蘭	Greenland	50	賴比瑞亞	Liberia	60
利比亞	Libya	50	阿　曼	Oman	50	敘利亞	Syria	50
盧森堡	Luxembourg	50	巴基斯坦	Pakistan	50	大溪地	Tahiti	60
澳　門	Macao	50	巴拿馬	Panama	60	中華民國	R.O.C. Taiwan	60
馬得拉群島	Madeiral	50	巴拉奎	Paraguay	50	坦尚尼亞	Tanzania	50
馬約卡島	Majokca Island	50	秘　魯	Peru	60	泰　國	Thailand	50
馬拉加西	Malagasy	50	菲律賓	Philippines	60	多哥共和國	Togo Rep.of	50
馬拉威	Malawi	50	波　蘭	Poland	50	東　加	Tonga	50
馬來西亞	Malaysia	50	葡萄牙	Portugal	〃	千里達	Trinidad	60
馬　利	Mali Rep.	50	波多黎各	Puerto Rico	60	他巴哥	Tobago	60
馬爾他	Malta	50	科　托	Qatar	50	突尼西亞	Tunisia	50
馬丁尼克島	Martinique	50	羅德西亞	Rhodesia	50	土耳其	Turkey	50
茅里塔尼亞	Mauritania	50	羅馬尼亞	Romania	50	烏干達	Uganda	50
模里西斯	Mauritius	50	盧安達	Rwanda	50	美　國	USA.	60
墨西哥	Mexico	60	沙烏地 阿拉伯	Saudi Arabia	50 60	蘇　聯	USSR	50
摩那哥	Monaco	50	蘇格蘭	Scotland	50	英　國	United Kingdom	50
蒙特色納島	Montserrat	60	塞內加爾	Senegal	50	上伏塔	Upper Volta	50
摩洛哥	Morocco	50	獅子山	Sierra Leone	50	烏拉奎	Uruguay	50
莫桑鼻克	Mozambique	50	新加坡	Singapore	50	委內瑞拉	Venezuela	60
尼泊爾	Nepal	50	索馬利亞	Somalia	50	越　南	Viet-Nam	50
荷　爾	Netherlands	50	南非共和國	South Africa Rep.	50	維爾京群島	Virgin Island	60
新蘇格蘭	New Caledonia	50	西班牙	Spain	50	西薩摩亞	Western Samoa	50
紐西蘭	New Zealand	50	斯里蘭卡	Sri Lanka	50	葉門亞丁	Yeman(Aden)	50
尼加拉瓜	Nicaragua	60	蘇　丹	Sudan	50	葉門阿拉伯	Yemen(Arab)	50
尼　日	Niger	50	蘇利南	Surinam	60	南斯拉夫	Yugoslavia	50
奈及利亞	Nigeria	50	史瓦濟蘭	Swaziland	50	薩伊共和國	Zaire Rep. of	50
挪　威	Norway	50	瑞　典	Sweden	50	尚比亞	Zambia	50
琉　球	Okinawa	60	瑞　士	Switzerland	50			